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CLAIMS:

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1. An inorganic boranophosphate salt of the general formula 2:

5 wherein M is a counterion.

- 2. An inorganic boranophosphate salt according to claim 1 wherein the counterion M is ammonium (NH₄⁺) or an inorganic cation derived from an alkali, alkaline earth or transition metal.
- 3. The inorganic boranophosphate salt according to claim 2 wherein the counterion M is Na⁺, K⁺, Li⁺, Ca⁺⁺, Mg⁺⁺, Ni⁺⁺, Cu⁺⁺, Fe⁺⁺, Fe⁺⁺⁺, Co⁺⁺, Zn⁺⁺, Pd⁺⁺, or Ag⁺.
 - 3. An inorganic boranophosphate salt according to claim 1 wherein the counterion M is an organic cation derived from an amine of the formula R_3NH^+ , wherein R is C_1 - C_{18} , alkyl, phenyl, heteroaryl or two of the Rs together with the nitrogen atom to which they are attached form a 3-7 membered ring optionally containing a further heteroatom selected from the group consisting of N, S and O.
 - 4. The inorganic boranophosphate salt according to claim 3 wherein each R is C_1 - C_6 , alkyl, more preferably ethyl, propyl or butyl
- 5. The inorganic boranophosphate salt according to claim 1 selected from the group consisting of ammonium boranophosphate, triethylammonium boranophosphate, and tributylammonium boranophosphate.
 - 6. A method for the preparation of an inorganic boranophosphate salt according to claim 1, comprising reacting tris(trimethylsilyl)-phosphite with

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borane-dimethylsulfide complex of the formula BH₃·SMe₂, in dry acetonitrile under inert gas, and treating the formed intermediate with the suitable base MOH in water or methanol, thus obtaining the desired salt.

- 7. The method according to claim 6, wherein said base is methanolic ammonia or an aqueous NH₄OH solution, thus resulting in the ammonium salt, wherein M is NH₄⁺.
 - 8. The method according to claim 6, wherein said base is tributylamine, Bu₃N, in methanol, thus resulting in the tributylammonium salt, wherein M is Bu₃NH⁺.
- 9. The method according to claim 6, comprising treating the intermediate with triethylammonium bicarbonate buffer, thus resulting in the Et₃NH⁺ salt.
 - 10. Use of a boranophosphate salt according to any one of claims 1 to 5 for the manufacture of a pharmaceutical preparation for boron neutron-capture therapy of cancer.
- 11. Use of a boranophosphate salt according to any one of claims 1 to 5 as synthetic building blocks in the synthesis of borano nucleotides.